

ACCESSION #: 9609030343

LICENSEE EVENT REPORT (LER)

FACILITY NAME: Vogtle Electric Generating Plant PAGE: 1 OF 3

- Unit 1

DOCKET NUMBER: 05000424

TITLE: RX TRIP DUE TO BLOWN FUSE IN MAIN FEEDWATER ISOLATION
VALVE

EVENT DATE: 05/25/96 LER #: 96-006-01 REPORT DATE: 08/26/96

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR
SECTION:

50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:

NAME: Mehdi Sheibani, Nuclear Safety and TELEPHONE: (706) 826-3209

Compliance

COMPONENT FAILURE DESCRIPTION:

CAUSE: B SYSTEM: SJ COMPONENT: FU MANUFACTURER: C634

REPORTABLE NPRDS: N

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On May 25, 1996, the balance of plant operator (BOP) noticed feedwater trouble alarms for steam generator (SG) #1. The BOP attempted to increase feedwater flow. Concurrently, the shift superintendent (SS) noted a lack of indication lights for SG #1 main feedwater isolation valve (MFIV) 1HV-5227. As SG #1 water level continued to decline, the reactor operator manually tripped the reactor at 0253 EDT. Main feedwater

isolation and auxiliary feedwater (AFW) actuation occurred as designed. Control room operators responded to stabilize SG water levels and transition the unit to stable operation in Mode 3 (hot standby).

The cause of this event was the failure of a fuse in the control circuit of 1HV-5227. The fuse was replaced and the unit was restarted and returned to power. An analysis of the failed fuse was performed, and no cause for fuse failure at normal operating conditions could be found. However, analysis of a similar fuse from warehouse stock found an inadequate solder joint that could lead to premature fuse failure. Replacement of similar fuses in the same type of application will take place during each unit's next refueling outage.

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A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because an unplanned reactor protection system actuation occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 1 was operating in Mode 1 (power operation) at 100 percent of rated thermal power. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On May 25, 1996, at 0251 EDT, the balance of plant operator (BOP) noticed feedwater flow related alarms for steam generator (SG) #1, including "Steam Flow/Feed Flow Mismatch" and "SG #1 Hi-Lo Deviation." The BOP attempted to increase feedwater flow. Concurrently, the shift superintendent (SS) noted a lack of indication lights for SG #1 main feedwater isolation valve (MFIV) 1HV-5227. As SG #1 water level continued to decline, the reactor operator manually tripped the reactor

at 0253 EDT. Main feedwater isolation and auxiliary feedwater (AFW) actuation occurred as designed. Control room operators responded to stabilize SG water levels and transition the unit to stable operation in Mode 3 (hot standby).

D. CAUSE OF EVENT

The cause of this event was the failure of a fuse in the control circuit of 1HV-5227. The 3 ampere fuse involved was found to have an open circuit across its contacts. The fuse was sent offsite for failure analysis and no cause for fuse failure at normal operating conditions could be found. However, analysis of a similar fuse from warehouse stock found an inadequate solder joint between the short circuit wire and the heater assembly that could lead to premature fuse failure. Although the vendor stated that the fuse design had been changed in 1991 to "improve performance", both the failed fuse and the fuse from the warehouse stock had been manufactured prior to 1991.

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E. ANALYSIS OF EVENT

Control room operators properly responded to the decline in SG water levels by manually tripping the reactor and preventing a challenge to the automatic reactor protection systems. AFW actuated to supply water to the steam generators and operators again responded properly to control AFW flow and regain normal SG water levels. No problems arose following the trip that prevented operators from transitioning the plant to stable

operation in Mode 3. Based on these considerations, there was no adverse affect on plant safety or on the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

- 1) The fuse was replaced and the unit was restarted and returned to power.
- 2) Similar fuses in the same type of applications will be replaced during each unit's next refueling outage. A plan to replace similar fuses in different applications will be developed by December 1, 1996.

G. ADDITIONAL INFORMATION

1) Failed Components:

3-ampere fuse manufactured by Bussmann Fuses, a division of Cooper Industries.

Model number: FNQ-3.

2) Previous Similar Events:

None

3) Energy Industry Identification System Code:

Reactor Coolant System - AB

Main Feedwater System - SJ

Auxiliary Feedwater System - BA

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C. K. McCoy

Vice President, Nuclear Georgia Power

Vogtle Project the southern electric system

August 26, 1996

LCV-0824A

Docket No. 50-424

U. S. Nuclear Regulatory Commission

ATTN: Document Control Desk

Washington, D. C. 20555

Ladies and Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT

LICENSEE EVENT REPORT 1-96-6 Rev.1

REACTOR TRIP DUE TO BLOWN FUSE IN

MAIN FEEDWATER ISOLATION VALVE

In accordance with the requirements of 10 CFR 50.73, Georgia Power

Company (GPC) hereby submits a revision to the report associated with an

event that occurred on May 25, 1996.

Sincerely,

C. K. McCoy

CKM/TEW/PAH

Enclosure: LER 1-96-6 Rev.1

cc: Georgia Power Company

Mr. J. B. Beasley, Jr.

Mr. M. Sheibani

NORMS

U.S. Nuclear Regulatory Commission

Mr. S. D. Ebnetter, Regional Administrator

Mr. L. L. Wheeler, Licensing Project Manager, NRR

Mr. C. R. Ogle, Senior Resident Inspector, Vogtle

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